

ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: [antennas@antcom.com](mailto:antennas@antcom.com) . <http://www.antcom.com>

“-HF” for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: **-22dB@1616MHz, -34dB@1660MHz**  
 “-HFO” for Additional OmniStar/TerraStar Rejection: **-27dB@1545MHz**

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### SPECIFICATIONS

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
		ECO# 0023, RELEASE	Mar-24-09 S. HUYNH

**ELECTRICAL:**

	L1 GPS E5, E5a, E5b, Galileo L5 IRNSS	L2 GPS B2 Compass	L2 GLONASS E6 Galileo B3 Compass	OmniSTAR / L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS (1598 - 1608) MHz
FREQUENCY:	1176.45 ± 12.0 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15.0 MHz	1227.60 ± 12.0 MHz 1207.14 ± 10.0 MHz	1252.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10.0 MHz	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10.0 MHz	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	
RADIATION PATTERN:	RHCP		HEMISPHERICAL		RHCP	
POLARIZATION:	RHCP		RHCP		RHCP	
VSWR:	< 2.0:1		< 2.0:1		< 2.0:1	
IMPEDANCE:	50 ohms		50 ohms		50 ohms	
ANTENNA GAIN (dBi):	Free Space	5in G.P	Free Space	5in G.P	Free Space	5in G.P
@ 90° (ZENITH):	- 7	- 3	+ 0.5	+ 3	+ 1.9	+ 1.0
@ 10° Elevation:	- 13	- 10	- 5.6	- 4.1	- 7.1	- 5.0
@ 20° Elevation:	- 11	- 9	- 3.9	- 2.7	- 5.4	- 3.9
@ 30° Elevation:	- 10	- 8	- 2.6	- 0.8	- 4.3	- 2.6
@ 60 - 90° Elevation:	> -8	> -5	> -1	> 1.8	> 1.2	> 0.8
BEAM WIDTH (3dB):	105 Deg.	100 Deg.	105 Deg.	105 Deg.	95 Deg.	97 Deg.
AXIAL RATIO:	1.5 dB	3 dB	1 dB	1 dB	1 dB	1 dB
LIGHTNING PROTECTION:	DC GROUNDING					
LNA GAIN:	35 dB	35 dB	35 dB	33 dB	32 dB	31 dB
LNA NOISE FIGURE:	3.0 dB	3.0 dB	3.0 dB	3.0 dB	3.0 dB	3.0 dB
LNA P1dB Out:	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA					
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)					

**MECHANICAL:**

SIZE: DIAMETER: 2.63 in. [66.8 mm]  
 HEIGHT: 0.985 in. [25 mm]

WEIGHT: 5.5 oz. (156 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BASE IRIDITE PER MIL-C-5541F Class 1A

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
 COMPOSITE RADOME, IMPACT, ABRASION-RESISTANT, SOLVENT RESISTANT  
 SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: TNC FEMALE BULKHEAD CONNECTOR  
 (OPTION: SMA, BNC, N, N Bulkhead, MCX, MMCX)

**ENVIRONMENTAL:**

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]  
 70,000 ft.  
 > 30 G's

VIBRATION: HERMETICALLY SEAL

**FEDERAL & MILITARY SPECIFICATIONS:**

FAA TSO-C144, DO-160D, DO-228, MIL-C-5541, ANTCOM Connector from USA  
 MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

QUANTITY REQD	DESCRIPTION	PARTS LIST
1	O-Ring (94115K024), Item 553	
1	ADHESIVE GASKET	
1	WASHER, LOCK	AN936B816
1	HEX NUT, MOUNTING	M/2-20 HEX

**ANTCOM CORP**

2.6in Dia., Centered Connector  
 L1/L2 Glonass + L1/L2 GPS  
 + OmniStar G5 ANTENNA

DATE: 3/12/11  
 DRAWN BY: S. HUYNH  
 APPROVED: S. HUYNH  
 DATE: May-19-12

SCALE: 1/1  
 SHEET: 1 OF 1

SIZE:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ.	4: ARINC 743	S: NO CABLE	S: SMA; B: BNC	1: GLOSS WHITE #17925 PER FED-STD-598B
1.5: 1.8" SQ.	A: WITH LNA	X: NO CABLE	M: MCX; MM: MMCX	2: LUSTERLESS GRAY #36320 PER FED-STD-598B
2: 2.6" DIA.	P: WITHOUT LNA		N: N; NB: N-Bulkhead	3: OLIVE DRAB GREEN #34094 PER FED-STD-598B
3: 3.5" DIA.			T: TNC; TB: TNC-Bulkhead	4: LUSTERLESS BLACK #37038 PER FED-STD-598B
4: MIN ARINC				5: TAN #3; FS 23446 or 33446, FED-STD-595

**P/N: G5Ant-2ATBR1**

Dimensions: 0.25" [6.37] (MCX/MMCX), 0.46" [11.68] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83" [21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)

Other dimensions: 0.985 [25.01], R6.000 [R152.40], 0.801 [20.34], 0.25" [6.37] (MCX/MMCX), 0.46" [11.68] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83" [21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)

Connector: TNC BULKHEAD CONNECTOR (OPTION: SMA, BNC, N Bulkhead, MCX, MMCX)

O-Ring P/N: MS28775-024

Dimensions: 4x.625 [15.88] 4x.625 [15.88], 4-40 UNC x 0.250in Deep, 4x.815 [20.70] 4x.815 [20.70], 6-32 UNC-2B x 0.250in Deep

NMO Connector Option is Now Available for Some Antennas